

JONATHAN GARY LUNDGREN

North Central Agricultural Research Laboratory

USDA-ARS

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EDUCATION:

2003	Ph.D.	Entomology	University of Illinois
2000	M.S.	Entomology	University of Minnesota
1998	B.S.	Biology	University of Minnesota

EMPLOYMENT HISTORY:

2008-Present	Research entomologist GS-13 (Lead Scientist), North Central Agricultural Research Laboratory, USDA-ARS
11/2004–2008	Research entomologist GS-12, North Central Agricultural Research Laboratory, USDA-ARS
1/2004–11/2004	Associate research scientist III, Center for Ecological Entomology, Illinois Natural History Survey
2001–2003	Research assistant, Department of Entomology, University of Illinois
1999–2001	Research assistant, Department of Entomology, University of Minnesota
1997–1999	Junior scientist, Department of Entomology, University of Minnesota
1997–1998	Technician, USDA-APHIS- Plant Protection & Quarantine
1997	Technician (seasonal) for the Minnesota Department of Agriculture

PROFESSIONAL ACTIVITIES:

AFFILIATIONS:

- Adjunct Professor. Department of Plant Science, South Dakota State University (2005-Present)
- Adjunct Professor. Department of Biology and Microbiology, South Dakota State University (2005-Present)
- Adjunct Professional Scientist. Center for Ecological Entomology, Illinois Natural History Survey (2005-Present)
- Adjunct Professor. Department of Entomology, North Dakota State University (2005-Present)

PROFESSIONAL SOCIETY MEMBERSHIP:

- International Organization for Biological Control (IOBC) (2001-Present).
 - Member of the IOBC Global Working Group: GMO Guidelines Project.
 - Corresponding Secretary for the IOBC-NRS 2006-Present
- Entomological Society of America (ESA) (1998-Present).
 - Section Ca Secretary 2006; Vice-Chair 2007
 - Section C representative to the Ethics Committee, 2005-present.
 - Section C representative to the Editorial Board of ESA Book and Media Reviews, 2003-2005.
 - Student Affairs Committee representative to the Program Committee- North Central Branch (NCB) of the ESA, 2003–2004.

- Member of the University of Illinois team for the ESA Graduate Student Debates, 2001-2003.

- Coleopterists Society. (2004-Present)
- Midwestern Carabidologists Working Group (2005-Present) founder and chair.
- NCERA-125 CSREES Regional Working Group (2005-Present).
- S1010 CSREES Regional Working Group (2006-Present).
- Member of the expert panel for the biological control of *Diabrotica virgifera*, a subgroup of the Diabr-Act consortium funded by the European Union (2006-Present).

SYMPOSIA ORGANIZED:

- Hagler, J. and **J. G. Lundgren**. 2009. Genetic and biochemical techniques in gut content analysis of predators. IOBC symposium, ESA national meeting, Indianapolis, IN.
- **Lundgren, J. G.** 2007. Ecological interactions of GM crops and biological control. IOBC-NRS/Mexican Biological Control Society Joint Meeting, Merida, Yucatan, Mexico.
- Weber, D. C., E. Riddick, **J. G. Lundgren**, N. Vandenberg. 2007. Lady beetle linkages. Member Symposium, ESA national meeting, San Diego, CA.
- **Lundgren, J. G.**, & D. C. Weber. 2005. Diversity of trophic relationships of the Carabidae. Section C, ESA national meeting, Fort Lauderdale, FL.
- **Lundgren, J. G.** 2005. Ground beetle ecology in the Midwest: their function and diversity in natural and agricultural habitats. ESA-NCB meeting, West Lafayette, IN.
- **Lundgren, J. G.** & M. Roberts. 2004. Entomology in Prairie Ecosystems. Presented at ESA-NCB meeting, Kansas City, MO.
- Duan, J. J. & **J. G. Lundgren**. 2004. Evaluating the Risk of Genetically Modified Plants to Natural Enemies: Learning from Transgenic Bt Crops. Presented at ESA-NCB meeting, Kansas City, MO.
- **Lundgren, J. G.** & B. Ellingson. 2003. Tritrophic Interactions Among Crops, Herbivores, and Their Natural Enemies. Presented at ESA-NCB meeting, Madison, WI.

SUPERVISORY RESPONSIBILITIES:

- Lucia Pilorget, mentored a Master's level research program, University of Rennes, Rennes, France (2008).
- Michael Seagraves, Post-doctoral Research Entomologist, Brookings, SD (2008-Present)
- Diane d'Esquerre, mentored a Master's level research program, AgroParisTech, Paris, France (2008).

EDITORIAL RESPONSIBILITIES:

Editor for ESA Book and Media Reviews (2005- Present; 126 book reviews edited to date).
Associate Editor for Environmental Entomology (2008-Present).

Peer reviewer for 33 journals: *Agricultural and Forest Entomology*, *Agronomy Journal*, *Annales Zoologici Fennici*, *Annals of the Entomological Society of America*, *Applied Entomology and Zoology*, *Arthropod-Plant Interactions*, *BioControl*, *Biological Control*, *Biology Letters for the Royal Society*, *Bulletin of Entomological Research*, *Crop Protection*,

Ecological Entomology, Ecological and Environmental Safety, Entomological News, Environmental Entomology, ESA Book and Media Reviews, European Journal of Entomology, FEMS Microbiology Ecology, Florida Entomologist, The Great Lakes Entomologist, International Journal of Pest Management, International Journal of Tropical Insect Science, Italian Journal of Zoology, Journal of Applied Entomology, Journal of Economic Entomology, Journal of Entomological Science, Journal of Insect Science, Journal of Pest Science, Molecular Ecology, Oecologia, Pesticide Biochemistry and Physiology, Transgenic Research, Weed Research.

OUTREACH/TEACHING EXPERIENCE:

OUTREACH

Dozens of radio, newspaper, magazine, and television interviews pertaining to regional and national entomological issues.

Regularly present entomology-related talks to stakeholders of all ages and walks of life.

Write the 'Insect Spotlight', a monthly 500-word column on insect biology and pest management in regional newspapers, including the Aberdeen Farm Forum, Midwest Producer, Brookings Register, Tri-State Neighbor, Yankton Press & Dakotan, Groton Independent, and Watertown Public Opinion newspapers (total circulation up to 285,000)(Since 4/05).

Featured on the regional television program "Today's Ag", April 10, 2005; May 12, 2006

Interviewed for the article "Beneficial Beetles" by Raylene Nickel, published in Successful Farming Magazine, May/June 2005.

Judged projects for the South Dakota Science Fair, 2005-2008.

Hosted the "Bugs don't bug us" day camp for grade school girls, Girl Scout Council of St. Croix Valley, MN, 2000.

TEACHING

Organized and instructed the short-course "Basic and Applied Ecology of the Coccinellidae".

IOBC Education Curriculum & Midwest Biological Control Institute, Amboy, IL, 2009.

Organized and instructed the short-course "The Natural History and Taxonomy of the Carabidae". IOBC Education Curriculum & Midwest Biological Control Institute, Brookings, SD, 2006, 2008.

Guest lecture for HO240, Vegetable Crops (SDSU; 2007)

Taught a workshop on Carabidae Taxonomy, University of Maine, 2006.

Teaching Assistant. IWIN course on field entomology. Illinois Natural History Survey, 2002.

Teaching Assistant. ENT321 Biological Control, University of Illinois, 2001.

Teaching Assistant. ENT5341 Biological Control of Insects and Weeds, University of Minnesota, 2000.

AWARDS AND HONORS:

Biological Resource Management for Sustainable Agricultural Systems Fellowship.

Organization for Economic Cooperation and Development, 2006, (\$6.6k).

USDA Certificate of Merit, Superior Performance Appraisal, 2006, 2007, 2008, 2009.

William H. Luckmann Graduate Student Award. Illinois Natural History Survey, 2004.

Outstanding Graduate Student in Biological Control. IOBC–Nearctic Region, 2003.
Graduate Fellowship from the Department of Entomology, University of Illinois, 2001.
Allan Peterson Academic Achievement Award, Department of Entomology, University of Minnesota, 2000.

GRANTS AND CONTRACTS:

AFRI, Sustainable Agroecosystems Science: Long-term Ecosystems Project. 2009.

Improving Sustainability of Renewable Resources and Carbon Sequestration Through the Creation of a SAS-LTAP Northern Great Plains Study Site. Clay, D. (PI), S. Clay (Co-PI), T. Schumacher (Co-PI), T. DeSutter (Co-PI), M. Miller (Co-PI), L. Janssen (Co-PI), A. Lenssen (Co-PI), J. Stone (Co-PI), D. Franzen (Co-PI), R. Stover (Co-PI), G. Carlson (Co-PI), **J. Lundgren** (Co-PI), C. Johnson (Co-PI), V. Brozel (Co-PI), V. Owens (Co-PI) (\$200k requested, pending).

Czech Science Foundation. Factors of seedling establishment in dandelion, *Taraxacum* sect. *ruderalia*. P. Saska (Lead PI), Z. Martinková (Co-PI), A. Honěk (Co-PI), V. Pavlů (Co-PI), L. Pavlů (Co-PI) and **J. G. Lundgren** (international collaborator) (2009-2014; \$180k awarded)

SD Agricultural Experiment Station. Biological control of corn rootworm in long-term continuous corn and stacked corn at the Dakota Lakes Research Farm. B. Fuller, D. Beck, W. Riedell, J. Lundgren, and B. McManus (2008-9; \$47k awarded).

NC IPM. Predation of immature corn rootworms by subterranean mites. D. Prischmann and **J. G. Lundgren** (2008-9; \$10k awarded).

BARD; Binational Agricultural Research and Development Fund. 2007. Ecological services provided by omnivorous biological control agents in diversified cropland: merging molecular and ecological tools. **J. G. Lundgren** and M. Coll (\$359k; 2007; not awarded).

USDA-ARS Postdoctoral Research Associate Program. Biodiversity as a source of pest management in soybeans. **J. G. Lundgren** (2008–9; \$100k).

USDA-ARS-Office of Technology Transfer. 2006. Funding for the short course Natural History and Taxonomy of the Carabidae. **J. G. Lundgren** (\$2.1k)

KAPTO Incorporated. Product development for their capsaicin-based pesticide for use against soybean insect pests. **J. G. Lundgren** (2005; \$1.5 k)

University of Illinois Research Board. The influence of ground beetles on weed communities in organic-transition agroecosystems. Masiunas, J. B. (PI), and **J. G. Lundgren** (Co-PI). (2004; \$9k).

USDA, CSREES. Integrated research, education, and extension competitive grants program- IPM. Cropping intensity and organic amendments in transitional farming systems: effects on soil fertility, weeds, diseases, and insects. Eastman, C. E. (PD), M. Bazik, D. A. Cavanaugh-Grant, L. R. Cooperband, D. M. Eastburn, **J. G. Lundgren** (Co-PD), J. B. Masiunas, J. T. Shaw, M. M. Wander, and E. R. Zaborski. (2003–7; \$483k)

Monsanto Company. Lundgren, J. G. and R. N. Wiedenmann. Helped to negotiate \$90k+ in funds for research (2001–3)

Minnesota Department of Agriculture: Biological Control Program. Integration of biological control strategies for suppression of lepidopteran crucifer pests. **Lundgren, J. G.** (PI) and G. E. Heimpel. (2000; \$32k)

North American Pesticide Impact and Assessment Program. Biological control of cole crop pests. Heimpel, G. E., and **J. G. Lundgren** (Co-PI). (1999–2000; \$17k)

INVITED PRESENTATIONS

- Lundgren, J. G.** 2009. The importance of non-prey foods to entomophagous insects: coccinellids as a case study. 1st International Entomophagous Insects Conference, Minneapolis, MN.
- Lundgren, J. G.** and J. D. Harwood. 2009. Diverse consumption of insects and weed seeds by granivorous omnivores. Oral presentation, Weeds and Biodiversity Workshop of the European Weed Research Society, Lleida, Spain.
- Lundgren, J. G.** and D. C. Weber. 2009. Unraveling the nutritional ecology of an omnivorous coccinellid using molecular techniques. 3rd International Symposium for the Biological Control of Arthropods, Christchurch, NZ.
- Lundgren, J. G.,** D. C. Weber and M. Greenstone. 2009. Advancing PCR-based gut content analysis of predators under field conditions: new approaches to increase its relevancy to biological control. Oral Presentation, ESA Annual Meeting, Indianapolis, IN.
- Weber, D. C., B. Pfannenstiel, and **J. G. Lundgren.** 2009. Diel predation pattern assessment and exploitation of sentinel prey: New interpretations of community and individual behaviours. 3rd International Symposium for the Biological Control of Arthropods, Christchurch, NZ.
- Seagraves, M. P. and **J. G. Lundgren.** 2009. Factors affecting *Orius insidiosus* oviposition decisions: plant quality and the presence of food resources. 1st International Entomophagous Insects Conference, Minneapolis, MN.
- Lundgren, J. G.** 2008. Diel predation patterns of predator communities: Melding ecological and molecular tools. Oral presentation, ESA Annual Meeting, Reno, NV.
- Lundgren, J. G.** 2008. Pest management benefits of biodiversity. National Resource and Conservation Service Plant and Soil Science Workshop, Brookings, SD.
- Lundgren, J. G.** 2008. Vegetational diversity and biological control. South Dakota Weed and Pest Conference, Huron, SD.
- Lundgren, J. G.** 2008. Non-prey foods of carnivorous insects: insights into the evolution of herbivory. North Central Soil Conservation Research Laboratory, USDA-ARS, Morris, MN.
- Duan, J. J., R. Rose, **J. G. Lundgren,** S. Naranjo, and G. P. Dively. 2007. Design of laboratory Tier I studies for environmental risk assessment: learning from meta-analysis of published NTO studies of Bt crops. Oral Presentation, ESA Annual Meeting, San Diego, CA
- Lundgren, J. G.** 2007. The importance of non-prey foods to the life history of coccinellids. Oral Presentation, ESA Annual Meeting, San Diego, CA
- Weber, D. C., **J. G. Lundgren.** 2007. Using molecular techniques to help understand coccinellid feeding dynamics. Oral Presentation, ESA Annual Meeting, San Diego, CA
- Lundgren, J. G.** 2007. Herbicide-tolerant crops and biological control: the role of plant diversity in supporting natural enemies. Oral Presentation, IOBC-NRS Meeting, Merida, Mexico.
- Lundgren, J. G.** 2007. Pollinivory and the ecological risk assessment of GM corn. Agroscope Reckenholz, Zurich, Switzerland.
- Lundgren, J. G.** 2007. Seeing beneath the soil: predator-prey interactions involving *Diabrotica virgifera* immatures. CABI BioScience Swiss Center, Delemont, Switzerland.

- Lundgren, J. G.** 2007. Sticky, toxic blood: Predator interactions with western corn rootworm larvae. NCARL/Plant Science Department, SDSU, Brookings, SD.
- Lundgren, J. G.** 2006. The role of transitional foods in the evolution of herbivory in insects. Department of Biological Sciences, University of Maine, Orono, ME.
- Lundgren, J. G.** 2006. The evolution of herbivory in insects: Lessons from non-prey foods of entomophagous species. Department of Entomology, University of Nebraska, Lincoln, NE.
- Lundgren, J. G.** 2006. The evolution of herbivory in insects: Lessons from non-prey foods of entomophagous species. Insect Biological Control Laboratory Seminar Series, USDA-ARS, Beltsville, Maryland.
- Duan, J. J., M. S. Paradise, C. R. Brown, **J. G. Lundgren**, R. N. Wiedenmann. 2005. Evaluation of the impact of transgenic Bt corn expressing Cry3Bb1 protein on non-target ground beetles. Oral presentation, ESA Annual Meeting, Fort Lauderdale, FL.
- Lundgren, J. G.**, J. Chee-Sanford, M. Lehman. 2005. The role of gut microfauna in ground beetle feeding habits. Oral presentation, ESA Annual Meeting, Fort Lauderdale, FL.
- Duan, J. J., M. S. Paradise, & **J. G. Lundgren**. 2005. Effects of E-64 proteinase inhibitor on larvae of the ground beetle *Poecilus chalcites*: implications for tier-I non-target organism testing for risk assessment of transgenic crops. ESA-NCB meeting, West Lafayette, IN.
- Lundgren, J. G.** 2005. Farm management intensity and biological control. ESA-NCB Meeting, West Lafayette, IN.
- Lundgren, J. G.** 2005. Farm management intensity and biological control. Plant Science Department, South Dakota State University, Brookings, SD.
- Lundgren, J. G.** 2005. Pollen-feeding by the predator, *Coleomegilla maculata*, and its implications for ecological risk assessments of transgenic crops. Department of Biology and Microbiology seminar series, South Dakota State University, Brookings, SD.
- Lundgren, J. G.** 2005. Pollen-feeding by the predator, *Coleomegilla maculata*, and its implications for ecological risk assessments of transgenic crops. Northern Crop Sciences Laboratory, USDA-ARS and Department of Entomology, North Dakota State University, Fargo, ND.
- Lundgren, J. G.** 2004. Pollen-feeding by the predator, *Coleomegilla maculata*, and its implications for ecological risk assessments of transgenic crops. Department of Entomology seminar series, University of Kentucky, Lexington, KY.
- Lundgren, J. G.** 2004. Biological Control of Insects and Weeds: Integrating Biological Control with Transgenics and Farm Management Practices. Center for Ecological Entomology, Illinois Natural History Survey, Champaign, IL.
- Lundgren, J. G.** 2004. Efforts in Incorporating Biological Control into IPM Systems. Northern Grains Insects Research Laboratory, USDA-ARS, Brookings, SD.
- Lundgren, J. G.** 2004. Pollen-feeding by the predator, *Coleomegilla maculata*, and its implications for ecological risk assessments of transgenic crops. Department of Entomology Seminar Series, Purdue University, West Lafayette, IN.
- Lundgren, J. G.** & R. N. Wiedenmann. 2004. Transgenic insecticidal corn pollen and *Coleomegilla maculata*. Monsanto Company Seminar Series, St Louis, MO.
- Lundgren, J. G.** and R. N. Wiedenmann. 2004. Assessing the risk of bi-trophic interactions between *Bt* crops and natural enemies: a case study involving pollen-feeding by *Coleomegilla maculata*. ESA-NCB Meeting; Kansas City, MO.
- Lundgren, J. G.**, and R. N. Wiedenmann. 2003. Assessing the risk of ingesting prey fed on insecticidal corn to *Coleomegilla maculata*. ESA-NCB Meeting; Madison, WI.

Lundgren, J. G., and G. E. Heimpel. 2002. Augmentation of *Trichogramma brassicae* for control of cruciferous Lepidoptera. Invited Oral Presentation, 1st International Symposium on the Biological Control of Arthropods; Honolulu, HA.

CONTRIBUTED PRESENTATIONS AT RECENT PROFESSIONAL MEETINGS:

Seagraves, M. P. and **J. G. Lundgren**. 2008. Impact of non-crop patches on soybean aphid predation. Poster presentation, ESA Annual Meeting, Reno, NV.

Prischmann, D., **J. G. Lundgren**, K. Dashiell. 2008. Mites as predators of immature corn rootworms (*Diabrotica* sp.). Poster presentation, ESA Annual Meeting, Reno, NV.

Lundgren, J. G., T. Haye, S. Toepfer, and U. Kuhlmann. 2007. Biotic mortality factors affecting *Diabrotica virgifera*: a collaborative approach. Poster Presentation, IOBC-NRS Meeting, Merida, Mexico.

Riedell, W. E., **J. G. Lundgren**, S. L. Osborne, J. L. Pikul Jr. 2006. Soybean N relations and bean leaf beetle biology. Poster presentation, American Society of Agronomy, Indianapolis, IN.

Hesler, L., K. Dashiell, and **J. G. Lundgren**. 2006. Antibiosis and antixenosis to *Aphis glycines* in soybean accessions. Oral presentation, International Plant Resistance to Insects Workshop, West Lafayette, IN.

Lundgren, J. G., W. Riedell, K. Wyckhuys, and N. Desneux. 2006. Plant-mediated reproduction in *Orius insidiosus* and its implications for biological control. Oral presentation, ESA Annual Meeting, Indianapolis, IN.

Tilmon, K. J., D. Prischmann, L. Hesler, and **J. G. Lundgren**. 2006. Impact of *Harmonia axyridis* and *Orius* spp. on soybean aphids in a field cage experiment. Oral presentation, ESA-NCB Meeting, Bloomington, IL.

Tilmon, K. J., D. Prischmann, L. Hesler, and **J. G. Lundgren**. 2006. Impact of *Harmonia axyridis* and *Orius* spp. on soybean aphids in a field cage experiment. Oral presentation, ESA Annual Meeting, Indianapolis, IN.

Weber, D. C., **J. G. Lundgren**, D. L. Rowley, and M. M. Athanas. 2006. Quantifying predation of Colorado potato beetle by larval *Coleomegilla maculata* using real-time PCR. Oral presentation, ESA Annual Meeting, Indianapolis, IN.

Eastman, C. E., E. R. Zaborski, **J. G. Lundgren**, J. T. Shaw, M. Wander, J. B. Masiunas, L. Cooperband, D. Eastburn, D. Cavanaugh-Grant, D. Anderson, M. Bazik. 2005. Transition to organic production: How will soil fertility, soil biology, and pest management be affected? Poster presentation, NCB-ESA Meeting, West Lafayette, IN.

Lundgren, J. G. 2005. Egg laying behavior of *Orius insidiosus*: preferences for crop plants. Poster presentation, ESA Annual Meeting, Fort Lauderdale, FL.

Lundgren, J. G. 2005. The influence of management intensity on biological control of insects and weed seeds. Oral Presentation, IOBC-NRS/Biocontrol Network Joint Meeting, Magog, Quebec.

Riedell, W. E., **J. G. Lundgren**, S. L. Osborne, and J. L. Pikul, Jr. 2005. Initial studies on soybean nitrogen fertilizer, soil nitrate-N, and bean leaf beetle biology. Poster presentation, Great Plains Soil Fertility Conference, Denver CO.

Greenstone, M., D. Rowley, U. Heimbach, and **J. Lundgren**. 2004. Identification of immature generalist predators by polymerase chain reaction: proof of concept with cytochrome oxidase

- I of two *Poecilus* species. Poster presentation, XV International Plant Protection Congress, Beijing, China.
- Greenstone, M. D., D. Rowley, U. Heimbach, **J. G. Lundgren**, and R. Pfannenstiel. 2004. Barcoding immature generalist predators by polymerase chain reaction: Carabids and spiders. Poster presentation, ESA Annual Meeting; Salt Lake City, UT.
- Lundgren, J. G.** 2004. The role of ground beetles in organic systems: implications of organic transition strategies for ground beetle community structure. Oral Presentation, ESA Annual Meeting; Salt Lake City, UT.
- Paradise, M. S., J. J. Duan, **J. G. Lundgren**, & R. N. Wiedenmann. 2004. Development of a laboratory rearing and diet exposure system for *Poecilus chalcites* Say (Coleoptera: Carabidae) for the evaluation of insecticidal substances on a non-target organism. Oral Presentation, ESA Annual Meeting; Salt Lake City, UT.
- Lundgren, J. G.** 2003. Pollen feeding by the predator, *Coleomegilla maculata*. Oral Presentation, ESA Annual Meeting; Cincinnati, OH.
- Lundgren, J. G.**, and R. N. Wiedenmann. 2002. The effect of ingesting coleopteran-specific transgenic pollen on the fitness of *Coleomegilla maculata*. Oral Presentation, ESA Annual Meeting; Fort Lauderdale, FL. * **1st place in the Student Competition** *
- Lundgren, J. G.**, and R. N. Wiedenmann. 2002. The alfalfa blotch leafminer in Illinois. Oral Presentation, ESA-NCB; East Lansing, MI.
- Lundgren, J. G.**, and R. N. Wiedenmann. 2002. Coleopteran-specific Cry3Bb1 toxin from transgenic corn pollen does not affect the fitness of a non-target species, *Coleomegilla maculata*. Poster Presentation, ESA-NCB, East Lansing, MI.
- Lundgren, J. G.**, and R. N. Wiedenmann. 2002. The effect of ingesting coleopteran-specific transgenic pollen on the fitness of *Coleomegilla maculata*. Oral Presentation, IOBC International Symposium on the Role of Genetics and Evolution in Biological Control; Montpellier, France.
- Lundgren, J. G.**, G. E. Heimpel, and S. A. Bomgren. 2000. Use of *Trichogramma brassicae* against imported cabbageworm and cabbage looper. Oral Presentation, ESA-NCB; Minneapolis, MN.
- Lundgren, J. G.**, G. E. Heimpel, and S. A. Bomgren. 1999. Use of *Trichogramma brassicae* against imported cabbageworm and cabbage looper. Oral Presentation, ESA Annual Meeting; Atlanta, GA.
- Lundgren, J. G.**, and G. E. Heimpel. 1999. Sex ratios of commercially reared parasitoids. Poster Presentation, XII Entomophagous Insects meeting; Monterey, CA.
- Venette, R. C., W. D. Hutchison, E. C. Burkness, P. K. O'Rourke, and **J. G. Lundgren**. 1999. Alfalfa blotch leafminer in the Midwest. Poster Presentation, ESA-NCB; Des Moines, IA.

REFEREED PUBLICATIONS (39):

- Lundgren, J. G.** In press. Nutritional aspects of non-prey foods in the life histories of predaceous Coccinellidae. Biological Control (*Invited Review*; submitted, 12-17-08; accepted 3-10-09).
- Lundgren, J. G.**, A. Gassmann, J. Bernal, J. J. Duan, J. Ruberson. In press. Ecological compatibility of GM crops and biological control. Crop Protection (submitted 3-9-09; accepted 5-22-09).

- Lundgren, J. G.**, T. Haye, S. Toepfer, and U. Kuhlmann. In press. A multifaceted hemolymph defense against predation in *Diabrotica virgifera* larvae. *Biocontrol Science and Technology* (submitted 3-6-09; accepted 7-7-09).
- Weber, D. C., and **J. G. Lundgren**. In press. Trophic ecology of the Coccinellidae: assessments of their roles as predators and as prey. *Biological Control* (*Invited review*, submitted 1-28-09; accepted 4-6-09).
- Lehman, R. M., **J. G. Lundgren**, and L. Petzke. 2009. Bacterial communities associated with the digestive tract of the predatory ground beetle, *Poecilus chalcites*, and their response to laboratory rearing and antibiotic treatment. *Microbial Ecology* 57: 349-358.
- Lundgren, J. G.**, M. E. Ellsbury, and D. A. Prischmann. 2009. Analysis of the predator community of a subterranean herbivorous insect based on polymerase chain reaction. *Ecological Applications*, 19(8): 107-116.
- Lundgren, J. G.**, L. S. Hesler, K. M. Tilmon, K. E. Dashiell, R. Scott. 2009. Direct effects of soybean varietal selection and *Aphis glycines*-resistant soybeans on natural enemies. *Arthropod-Plant Interactions* 3: 9-16.
- Lundgren, J. G.**, S. Nichols, D. A. Prischmann, M. E. Ellsbury. 2009. Seasonal and diel activity patterns of generalist predators associated with *Diabrotica virgifera* immatures (Coleoptera: Chrysomelidae). *BioControl Science and Technology* 19(3): 327-333.
- Lundgren, J. G.**, K. Wyckhuys, and N. Desneux. 2009. Population responses by *Orius insidiosus* to vegetational diversity. *BioControl* 54(1): 135-142.
- Toepfer, S., T. Haye, M. Erlandson, M. Goettel, **J. G. Lundgren**, R.G. Kleespies, D. C. Weber, G. Cabrera Walsh, J. Jackson, A. Peters, R.-U. Ehlers, H. Strasser, D. Moore, S. Keller, S. Vidal, U. Kuhlmann. 2009. A review of the natural enemies of beetles in the subtribe Diabroticina (Coleoptera: Chrysomelidae): Implications for sustainable pest management. *Biocontrol Science and Technology* 19(1): 1-65.
- Weber, D. C., and **J. G. Lundgren**. 2009. Quantification of predation using qPCR: Effect of prey quantity, elapsed time, chaser diet, and sample preservation. *Journal of Insect Science* 9: 41.
- Lundgren, J. G.**, J. K. Fergen, and W. E. Riedell. 2008. The influence of plant anatomy on oviposition and reproductive success of the omnivorous bug, *Orius insidiosus*. *Animal Behaviour* 75: 1495-1502
- Lundgren, J. G.** and W. E. Riedell. 2008. Feeding injury to soybean root systems by *Cerotoma trifurcata* larvae, and its effects on nitrogen relationships within the plant. *Journal of Entomological Science* 43(1): 107-116
- Wolfenbarger, L. L., S. E. Naranjo, **J. G. Lundgren**, R. J. Bitzer, and L. S. Watrud. 2008. *Bt* crop effects on functional guilds of non-target arthropods: a meta-analysis. *PLoS ONE* 3(5): e2118.doi:10.1371/journal.pone.0002118.
- Lundgren, J. G.**, K. Rosentrater. 2007. The strength of seeds and their destruction by granivorous insects. *Arthropod-Plant Interactions* 1(2): 93-99.
- Hesler, L. S., K. E. Dashiell, and **J. G. Lundgren**. 2007. Antibiosis and antixenosis to *Aphis glycines* in soybean accessions. *Euphytica* 154: 91-99.
- Lundgren, J. G.**, R. M. Lehman, and J. Chee-Sanford. 2007. The bacterial communities within the digestive tracts of ground beetles (Coleoptera: Carabidae). *Annals of the Entomological Society of America* 100: 275-282.
- Duan, J. J., M. S. Paradise, **J. G. Lundgren**, J. Bookout, C. Jiang, and R. N. Wiedenmann. 2006. Assessing Non-Target Impacts of Bt Corn Resistant to Corn Rootworms: Tier-1

- Testing with Larvae of *Poecilus chalcites* (Coleoptera: Carabidae). *Environmental Entomology* 35(1): 135-142.
- Lundgren, J. G.**, and J. K. Fergen. 2006. The oviposition behavior of the predator *Orius insidiosus* (Say) (Heteroptera: Anthrenidae): acceptability and preference for different plants. *BioControl* 51: 217-227.
- Lundgren, J. G.**, J. T. Shaw, E. R. Zaborski, & C. E. Eastman. 2006. The influence of organic transition systems on beneficial ground-dwelling arthropods and predation of insects and weed seeds. *Renewable Agriculture and Food Systems* 21(4): 227-237.
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